STS -1 LAUNCH MUTI-TV COVERAGE (4-12-1981)

https://www.youtube.com/watch?v=YnurBMtVIwg (https://www.youtube.com/watch?v=YnurBMtVIwg)

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From Sunday, April 12th 1981 Multi-network coverage view of STS-1 launch.
Left to right, CBS, ABC and NBC with ABC sound.

STS-1 CREW:
Commander: John Young
Pilot: Bob Crippen

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godspeed with john and that's going to be a great one without speeding water will be on a couple seconds from now it has been armed 45 seconds and counting that's a blast of cooling water frank uh that protects the minus counting recorders solid rocket engines t-minus 35 seconds away from switching to the redundancy t minus 27 seconds we have gone for redundance at sequence or start t minus 20 seconds and counting t minus 15 14 13 t minus 10 9 8 7 6 5 4 we've gone for main engine start we have go unbelievable jews they've rolled now jules and they're on her back just parking straight up into the sky

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the trail of the fumes you'll see using those solid rocket boosters about a minute they're through the maximum uh maximum aerodynamic pressure now to go back to 100 they've actually throttled back a little bit to get through the maximum pressure on the vehicle and now they've gone back to full throttle and everything looks to be perfectly perfect perfectly normal american thunder in the skies roger columbia on the nice ride you're lofting a little bit so you'll probably be slightly iron staging 145 seconds coming up on go to columbia your all right they're cleared to get rid of the srbs two minutes four seconds standing by for srb step confirmation i'm too high to use ejection seats but not even needing them there it is uh is converging this program colombia is now steering for its precise winner in space for main engine cut-off downrange mark two minutes 50 seconds you're looking a little hot all your calls will be a little early columbia has two engines around here

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and that's over 5000 miles an hour already jules mark three minutes 15 seconds columbia now 51 nautical miles in altitude 66 nautical miles downrange velocity now reading 6500 feet per second mark uh three minutes 30 seconds columbia now 55 nautical miles altitude 78 nautical miles downrange mark 340 seconds standing by for a return status check and mission control by flight director neal hutchinson columbia governor greene to continue everything fine so far solid rocket boosters have followed a 55 seconds standing by for oppressed amico which says columbia should lose one in just a press stand by preston colombia continues flying forward coming up on return the flash evaporator is activated onboard to cool up we're more than halfway now to the separation of the extra time 56 seconds colombia's lofting early in the second stage is now being taken out

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the second stage is now being taken out of the trajectories programmed columbia now 74 nautical miles in altitude 181 north america man one of you love you one of you i'm glad you're enjoying it for the separation of the year [Music] those massive engines this is a videotape for this one nine eight seven six five four we've gone for main engine start we have made america's first space shuttle and the shuttle has cleared the tower it is much faster than saturn but there's so much smoke from the solids you really can't see it until like 700 feet up tremendous bloom from our solids little break up there you see it out heading out over the atlantic now the electrical uh the external tank will fall off uh will be separated somewhere between cape hatteras and bermuda it will be about 920 miles out over the atlantic this is an animation of course just 6 minutes being tracked all the way of course this is the actually the configuration they

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is the actually the configuration they are flying upside down very shortly after they took off they rolled over and went into that upside down position with the tail down you want to see the launch replay again while we wait for the uh for the separation of the external tank we still have another knife for that let's see it again this time a little closer view this is a replay now of the uh of the launch which took place just seven minutes and 30 seconds away has cleared wow tower frank we're hearing confirmation that they could make it into orbit uh if only both engines two of the three engines fail if two engines fail they can still go into orbit that's what press to make what i mean that's right they can they can achieve orbit with a two engine failure whether it's just a single-engine capability now they've gone far enough into the mission but there's every indication all three engines are working perfectly this is still a video tape replay that you're seeing that gives us a slightly different angle of the way they roared off into the heavens eight minutes and 15 seconds ago and i must say i i always thought nothing could beat an apollo launch this uh this assemblage uh being of course so different in its appearance uh really was was utterly fantastic there you see on our map now the holding up right now to the point at which we are going to have the separation of the external tank and they've just been given up

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oh that's great all right they're on their own now three seconds confirm external tank separation the critical thing is maneuver moving below and beyond and translating the north of the external tank young should see it moving away out this winter they are gliding in flight now really we're not quite in orbit yet frank they've got to fire their their onboard uh orbiting maneuvering engines at this moment unpowered but it is going to uh we're going to fire the first of the orbital maneuvering systems that catapulted them up there the two solid rocket boosters and the external tank is now separated they have their own power necessary to give them a little additional boost to put them up into orbit they will go into an orbit first of all that is sort of an eggshell orbit it will be 150 by 63 miles or so and then later on they will circularize that orbit at about 170 miles so they've done very very well indeed and so far this mission is really proceeding flawlessly roger columbia they're looking good let's listen and see if we can get the confirmation of that first day of the control center the burn of their

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of the control center the burn of their own engines on board the uh the orbiter out of communications contact temporarily they'll pick them up again from the madrid station and john said everything's looking good and i think he said they had about 40 seconds to go well that is the first firing the first firing in space of those engines on board that spacecraft another first that's the first mission because the orbit the nominal orbit left that they were left with that mecca or main engine cut off was 13 by 81 miles long which is not nearly awarded and lost the signal with colombia through bermuda the next station to acquire will be madrid and that won't be very long now in the event by the way that uh they had to fly to uh to spain which was one of the alternate uh landing sites in case any difficulty developed it would have taken them only 37 minutes to get from here in cape canaveral to the rota air force base in spain without going there now they'll be picked up by the tracking station near madrid but as soon as we get here is houston in mission control where they're of course they're keeping a very close eye on it so everything has gone very well very well indeed now they lifted off in spectacular fashion everything hanging together quite literally and i think it might be useful now since we no longer can see them to uh see the liftoff from yet another angle we've got cameras scattered all over this place a good many of the masses some of the mars and we're going to see this videotape replay that took place

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replay that took place just about 13 minutes ago first the uh three powerful engines are ignited it almost disappears doesn't it therapy steve rising right up out of all the neighbors rocket boosters roaring away spending all their energy at what energy it is in less than two minutes there you see the way it rolled over rolling over now into the upside down position the astronauts having a fantastic view of the earth tailed down on the uh orbiter on columbia and the road was executed perfectly the reason for that roll over frank yes the reason for that rollover is twofold one uh so their radio antennas can be heard back at launch control the tremendous body of the external tank blocks it otherwise and two so they can see the external tank separate uh the external tank by the way do you want to do an h5 i'm going to multi-access the empty uh the empty launch pad now this is the scene in uh launch control here in the cape uh kennedy or the kennedy space center i should say i guess and now the preparations they get underway to clean up the mess left behind they're out of the site they'll be picked up next by the tracking station in spain we are still awaiting confirmation really that they have gone into orbit have we got it that we got the confirmation gene did you hear that no no uh frank i i don't think we've got them back in communications contact quite yet i haven't heard anything of that effect uh but we'll certainly know as soon as we get them because their own burns should be complete at that point in time but it was going so well that even they had completed enough of it that even if they didn't get a chance to complete it all i think they would have an opportunity

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i think they would have an opportunity to raise their orbit at the higher point or the apogee of their maneuver which is about halfway around the world on this orbit so i feel pretty confident at this time it sounds good frank certainly does the second arms burn gets them up to 130 by 130 nautical miles a circular orbit uh what's unusual about this vehicle is that the external when the external tank burns out 15 minutes 30 seconds flight dynamics officer jay green reports the olms one burn was normal time of ignition at 10 minutes 37 seconds measure last time delta v 164.7 feet per second duration of the burn one minute 27 seconds resulting orbit apogee 132 nautical miles per g 57 nautical miles so colombia is now in orbit not yet her desirable orbit at the start of olms one columbia was about 400 feet below 150 feet in front and 350 feet north of the external tank also columbia weighed four and a half million pounds at launch she now weighs about 214 000 pounds after 16 minutes mr last time this is shuttle control houston frank yes their orbit now so that everybody understands they are in a a very elliptical orbit they are climbing very rapidly to the 130 mile point on their orbit uh at that point they will put some more energy into their orbit to bring the low point which will occur over florida here uh the second one yeah with their second homes burn they'll bring that low point which normally would occur over florida up to a higher altitude i believe around 130 miles so that they're circular should they not do that second ohms burn they would be desperately close

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they would be desperately close coming down from that 130 miles over the united states desperately close to actually re-entering because of the thickness of the atmosphere up around 57 miles so second homes burn is very critical they are in orbit they must get some energy into the orbit about halfway around the world when they get to 130 miles above the earth so that they can bring the other half of the of the oval if you will uh the part that at the low point that occurs over the united states up to 130 miles then they'll be circular later on they go up to 150 miles this next burn is something we want to watch for and that will be in about 20 minutes gene do you think i think it's about shuttle 48 seconds into the mission now and all the signs and indications are good that everything is going very well indeed it was a spectacular launch everything separated just on time they are in orbit and uh they will uh you know about 30 minutes or so once again i beg your pardon we're 26 minutes away from the second homeless bird 26 minutes away when they will circularize their orbit and get into a more desirable orbit but they are in orbit right now we'll have more of course on the flight of colombia our coverage of space shuttle columbia will continue in a moment

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